TOPFIELD™

The User's Manual

Digital Terrestrial Receiver
Personal Video Recorder

TF5800PVR

Please read this User's Manual carefully.
The menu structure and specification can be changed without notice.

TABLE OF CONTENTS

INTRODUCTION 6
CONTENTS 6
FEATURES 7
FRONT/ REAR PANELS 8
REMOTE CONTROL UNIT(RCU) 10
INSTALLATION (Connection) 13
Connection to TV, VCR and Hi-Fi 13
Connection to the Antenna. 14
GETTING STARTED 15
MENU OPERATIONS 16
System Setting 17
Time Setting 17
Timer Setting 18
Parental Control 20
Language Setting 21
A/V Output Setting 22
OSD Transparency 23
Info Box Display Time 23
Info Box Position 23
Time Shifting 23
Organizing Favorites 24
Recording 25
Installation 26
Service Search 27
Factory Setting 28
Format Hard Disk 28
Transfer Firmware 29
Information 29
IRD Status 29
Calendar 30
Common Interface 30
Game 30
FUNCTION GUIDE 31
Service List 31
Information Box 32
EPG (Electronic Program Guide) 33
Option Button 34
Fav List 34
Subtitle 34
Teletext 34

TABLE OF CONTENTS

Sound Track 35
Multifeed 35
Sleep Time 35
Time Shifting 36
Recording while Time Shifting 37
Recording, Checking and Editing the reserved delayed recording 38
Immediate Recording by RECORD button 38
Immediate Recording by Menu Selection 40
Delayed Recording 41
Recording by EPG 41
Playback a Recorded Service 42
Stop 43
Pausing 43
Slow Motion Playback 44
Fast Motion Playback 44
Fast Forwarding and Rewinding 44
Reverse Playback 44
Bookmark 45
Recording The Descrambled Live Service 46
Descrambling Recorded Services 46
Copying from Recorded Services 47
Cut Out / Save Selected Region 48
Time Shifting while Recording 48
Zapping while Recording 48
Picture In Picture (PIP) 49
Dual Recording 49
File List 50
Recorded Services List 50
MP3 File List 52
Program File List 53
Progress Icon 54
SOFTWARE UPGRADE AND PC INTERFACE 55
Software Upgrade 55
File download and upload via USB 55
MENU MAP 56
SPECIFICATIONS 58

WARNING

Please read the following recommended safety precautions carefully for your safety.

MAINS SUPPLY : 90-250V AC 50/60 Hz.

OVERLOADING : Do not overload wall outlets, extension cords or adapters as these can result in fire or electrical shock.

LIQUIDS : Keep liquids away from the PVR. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

FLAME SOURCES : Do not place naked flame sources, such as lighted candles, on the PVR or near the PVR.

SMALL OBJECTS : Coins or other small objects must be kept away from the PVR as they can fall through the ventilation slots of the PVR and cause serious damage.

CLEANING : Disconnect the PVR from the wall socket before cleaning it. Use a dry cloth lightly dampened(no solvents) to clean the exterior of the PVR.

VENTILATION : Do not block the PVR's ventilation slots. Ensure that a free airflow is maintained around the PVR.
Never stand the PVR on soft furnishings or carpets. Do not use or store the PVR where it is exposed to direct sunlight or near a heater.
Never stack other electronic equipment on top of the PVR.

ATTACHMENTS : Do not use any attachments that are not recommended as these may cause hazards or damage the equipment.

CONNECTION TO THE AERIAL ANTENNA : Disconnect the PVR from the mains before connecting or disconnecting the cable from the antenna. Failure to do so can damage the antenna.

SERVICING : Do not attempt to service this product by yourself. Do not remove the cover. Refer all serving to qualified service agents.

LIGHTNING : For protection we recommend that you connect the PVR via an external surge protection device. Disconnect the antenna cable from PVR during lighting storms.

WARNING

EARTHING : The antenna cable **must be earthed**.

LOCATION : Locate the PVR indoor place properly to prevent lightening, raining and direct sunlight. Do not allow the PVR to be exposed to hot, cold or humid conditions.

RESPONSIBILITY : Do not use the PVR and its contents for illegal purpose. We are not responsible for any kind of illegal use. Do not use the PVR to backup important data. It can be deleted. We are not responsible for any kind of problems caused by TAP application programs.

CAUTION

RISK ELECTRIC SHOCK
DO NOT OPEN

This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.

This symbol indicates important instructions accompanying the product.

CAUTION : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Warning

Please do not insert metal or alien substance into the slots for the Modules and Cards.

In doing so can cause damage to the PVR and reduce its life span.

INTRODUCTION

Thank you for purchasing the Personal Video Recorder (PVR).
This PVR is fully compliant with the international DVB standard and thus transmits digital images, sounds, information guides and teletext directly to your TV through the terrestrial broadcasting.
Now you can comfortably see and receive digitally transmitted music, news, movie and sports terrestrial broadcasts in your office or at your home. The PVR records and plays back terrestrial broadcasts. You can enjoy interesting games embedded in PVR.
In the Service Search sect ion, both the automatic service search method and the manual search mode are provided. You can save up to 2000 TV and Radio services and work around with the Favorite, Lock, Delete, Move and Sort functions.
The Menu is very modern and supports multiple languages. All functions can be carried out using the remote control and some of the functions can also be carried out using the front panel. The PVR is easy to use and adaptable for future advances. Please be aware that new software may change the functions of the PVR.
If you have any difficulties concerning the operation of your PVR, please refer to the relevant section of this manual. This Manual will provide you with useful information on using the PVR.

CONTENTS

Please ensure that the following items are included with the PVR.
1) Remote control unit
2) Batteries (size AAA)
3) User's Guide (this document)
4) Loop through cable (to connect Tuner 1 and Tuner 2)
5) RF Cable
6) SCART Cable

FEATURES

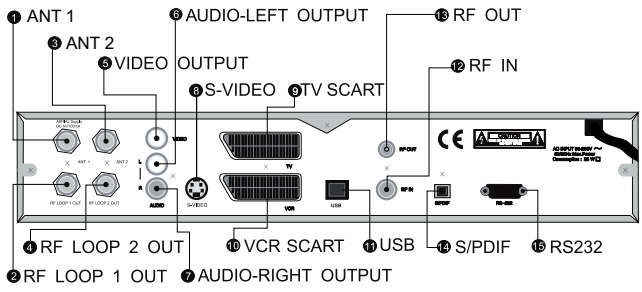
- MPEG-2 Digital and fully DVB compliant
- MHEG engine supported
- 2 Common Interfaces for CONAX, CRYPTOWORKS, IRDETO, NAGRAVISION, SECA & VIACCESS
- 2 Tuners
- 2000 services (TV and Radio) programmable
- Multilingual Audio support
- Multilingual menu text support
- Service switching time less than 1 second
- Favorite service list editing
- True-color On-Screen Display (OSD)
- Full Picture In Graphic (PIG) function
- Electronic Program Guide (EPG) for on screen service information
- Subtitle supported
- Teletext supported by VBI insertion and software emulation
- Parental lock facility by service and program event
- Program and Service information transfer from receiver to receiver
- Exciting games embedded
- S/PDIF for digital audio or Dolby AC-3 bitstream output
- Recording capacity : 80 hours for 4Mbps stream with 160GB HDD
- Powerful trick mode supported
- Playback of the selected region repeatedly
- Dual Decoding(PIP)
- Dual Recording and Playback simultaneously
- Dual recording and Time-shifting simultaneously
- USB 2.0 supported for fast PC interface
- MP3 (MPEG-1 Layer 3) decoding

FRONT/ REAR PANELS

1) FRONT PANEL

- POWER
The power button of STB (ON / Stand by)
- LED
TV / STB
REMOTE
STAND BY
- DISPLAY
During the STANDBY mode, the current time is displayed.
When the power is ON, the current status is displayed (TV/ Radio/ Menu).
- CHANNEL
Change the services
- VOLUME
Change audio volume level
- MENU
Display the Menu on screen.
- OK
Display service list on screen.
Select an item in the menu.

2) REAR PANEL



FRONT/ REAR PANELS

1. ANT 1
- Connect the terrestrial antenna cable

2 RF LOOP 1 OUT
- Use it to connect to another STB or Antenna 2 IN

3 ANT 2
- Connect the terrestrial antenna cable or RF LOOP OUT 1

4 RF LOOP 2 OUT
- Use it to connect to another STB or RF IN of RF modulator

5 VIDEO OUTPUT
- Video output. (YELLOW)

6 AUDIO-LEFT OUTPUT
- Audio output. (WHITE)

7. AUDIO-RIGHT OUTPUT
- Audio output. (RED)

8 S-VIDEO
- S-Video output. Connect the S-Video input of your TV.

9 TV SCART
- Connect the TV SCART

10 VCR SCART
- Connect the VCR SCART

11. USB port
- Connect USB port of PC

12 RF IN
- Connect the TV antenna or RF LOOP OUT 2

13 RF OUT
- Connect the TV RF IN

14 S/PDIF
- Optical output for Digital Audio

15 RS232
- Upgrade the PVR Program & software

REMOTE CONTROL UNIT(RCU)

1. POWER Button ( )
- Switch the PVR between Operation and Standby mode.

2. MUTE Button ( )
- Enable / Disable the Audio.

3. TV/ Radio Button ( )
- Select the TV/Radio mode.

4. TV/STB Button ( )
- Change the terrestrial TV and STB mode.

5. Option Button (Opt)
- Display FAV List/Sound Track/ Subtitle Track/Teletext Track/ Sleep Time modes

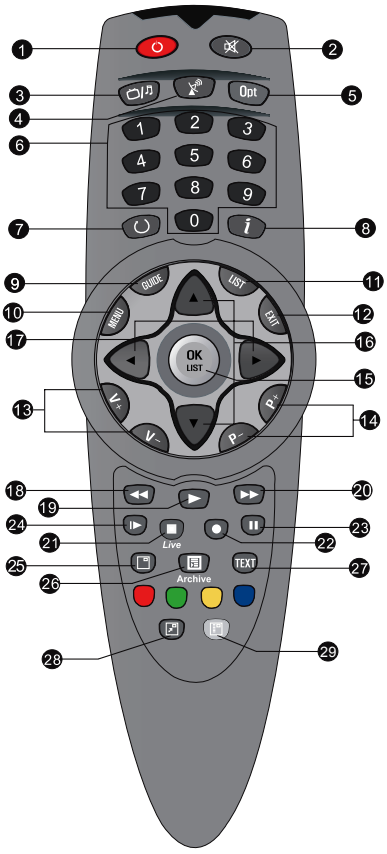
6. Numeric Buttons (0 ~ 9)
- Select the TV or Radio service and menu options.

7. RECALL Button ( )
- Select the previously viewed service.

8. INFO Button ( )
- Display the program information box on the Screen and remove it.
- Display the extended event information when the information box is displayed.

9. GUIDE Button ( )
- Display the EPG on screen when available.
- Remove EPG when EPG is displayed.

10. MENU Button ( )
- Display the Menu on screen or return to previous menu from submenu.



REMOTE CONTROL UNIT(RCU)

11. LIST Buttons ( )
- Display Service List on screen.
- Show Fav List by pressing twice.

12. EXIT Button ( )
- Return to the previous menu and the screen.

13. V+/V- Buttons ( )
- Adjust the volume (Increase / Decrease).

14. P+/P- Buttons ( )
- Service up or down through the available service.

15. OK Button ( )
- Display Service List on screen.
- Select an item in the menu.

16. ▲/▼ Buttons ( )
- Move the selection bar in Menu.

17. ◀/▶ Buttons ( )
- Change the value of the selected item in Menu.

18. Button
- Fast rewind when the progress bar is displayed.
- Start reverse playback.
- Change the speed of reverse playback.

19. Button
- Display the progress bar of time shifting or playback when no progress bar is displayed.
- Start playback with normal speed.
- Return to normal speed from trick mode.

20. Button
- Start fast forward or fast motion playback.
- Change the speed of forward playback.

21. Button
- Stop time shifting, playback or recording.

22. Button
- Start recording.

23. Button
- Pause the playback and live picture.

24. Button
- Start slow motion playback.
- Change the speed of slow motion playback.

25. Button
- Move the position of Sub-picture at the PIP by clockwise.

26. Button
- Display file list. (Recorded service list, MP3 file list, Application file list)

27. TEXT Button ( )
- Enable the digital teletext about interactive services.

28. Button

Exchange main-picture with sub-picture at the PIP.

29. Button
- Select the period for repeated playback or cutout.
- Display the service list of Sub-picture.

* 0 Button
- Change 4:3 Center Extract -> 4:3 Center box -> 16:9 Full srceen.

* Buttons

The above buttons are used for Interactive Services . So, the function in each OSD Screen can be referred in each instruction message in help window.

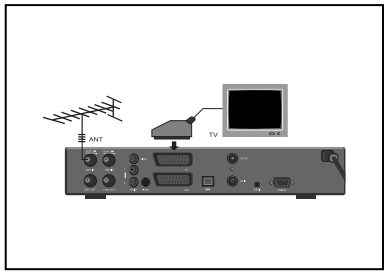
INSTALLATION (Connection)

First, connect both the aerial antenna and the TV to the PVR.
There are some of the most common ways to connect the equipment in this manual.
There are several ways of connecting the PVR to the existing Audio/TV system.
We recommend one of the following setup.
If you have problems with your connections and need help, contact your dealer or service provider.

Connection to TV, VCR and Hi-Fi

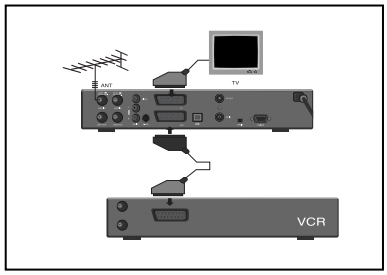
1) Connection to the TV with the SCART Cable.

Connect one end of the SCART cable to the TV SCART socket on the PVR and the other end to a SCART socket on the TV.



2) Connection to the VCR with a SCART Cable.

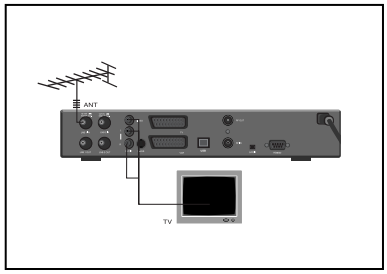
Connect one end of the SCART cable to the VCR SCART socket on the PVR and the other end to a SCART socket on the VCR.



3) Connection to the TV with the CINCH Cable.

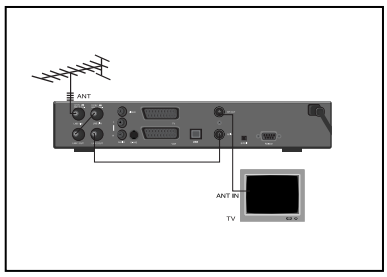
Connect one end (3 connectors) of the CINCH cable to the AUDIO-RIGHT (red), AUDIO-LEFT (white) and the VIDEO OUTOUT (yellow) socket on the PVR.

Connect the other end (3 connectors) to the AUDIO-RIGHT (red), AUDIO-LEFT(white) and the VIDEO INPUT (yellow) socket on the TV or Hi-Fi.



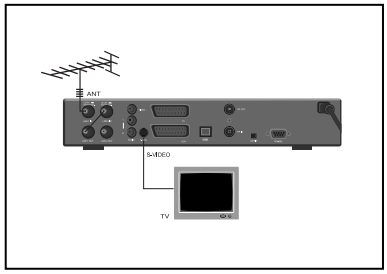
4) Connection to the TV using the RF cable.

Connect an aerial antenna or RF LOOP 2 OUT to RF IN socket on the PVR.
Connect one end of the RF cable to the RF OUT socket on the PVR.
Connect the other end to the ANT IN socket on the TV.
* The output signal from RF LOOP 2 OUT can be weak because the signal is decreased in the tuners. If the signal is too weak, use aerial antenna instead of RF LOOP 2 OUT.



5) Connection to the TV using the S-VIDEO.

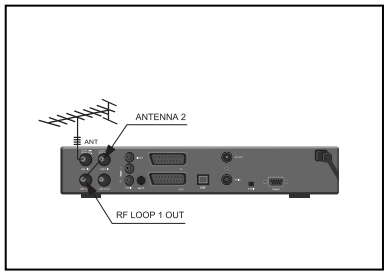
Connect one end of the S-VIDEO cable to the S-VIDEO socket on the PVR and the other end to a S-VIDEO socket on the TV.



Connection to the Antenna.

You must connect the aerial antenna cable to the ANT 1 and connect the RF LOOP 1 OUT to ANT 2.

* The signal from antenna can become weak at second tuner if connected from RF LOOPOUT1 to ANT 2.
Separate antennas for each tuner are recommended if the signal level of cascaded tuner is too weak.



GETTING STARTED

Press the Power ( ) button to operate the PVR from the STANDBY mode. Now, the Info Box will appear for a given time and disappear. By pressing button, the Info Box will remain on the screen. The display time of the Info Box is adjustable in the **System Setting** menu of the **Main** menu.

IMPORTANT: Before taking charge of your new PVR, some important technical settings are essential.

- First, press the **MENU** ( ) button on the RCU to make the Main Menu appear.
- Go to the **Installation** item and press button.
- Then, press button at **Service Search** item and go to the **Service Search** menu.
- Set the **Search Mode** to the **Auto**. (**Manual** or **advanced**)
- Select the **Antenna Supply 5V** to **On** or **Off** according to your antenna.
- Select the **Start Search...** item and press button.
- The search procedure will take a while. Press button when the searching process is finished to confirm and save the new service list.
- For further information, please refer to the MENU OPERATIONS in this manual.
- Please press button to apply MHEG application

MENU OPERATIONS

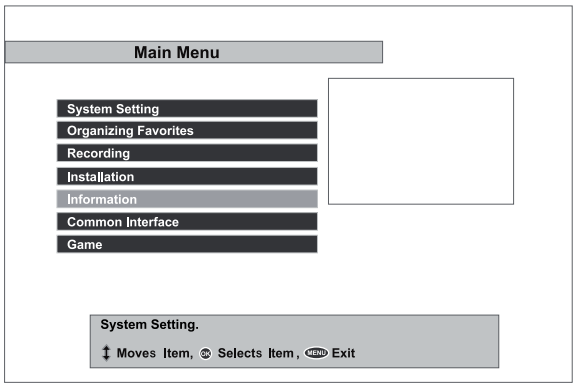
Now this chapter assumes that the PVR system has been installed correctly, meaning:

- The aerial antenna for the PVR has been installed, connected to the PVR.
- The PVR is connected to the TV.
- The RCU has batteries and ready to control the PVR.

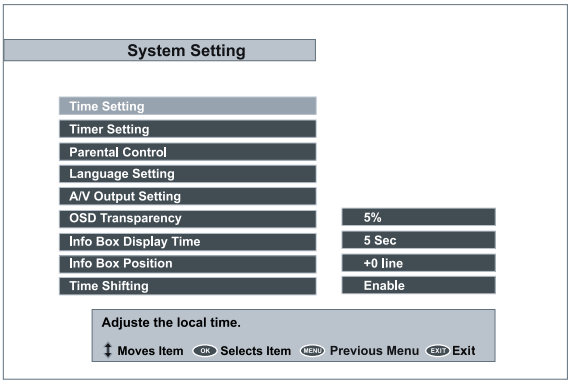
If the PVR has not been installed or connected properly, please refer to the **INSTALLATION** menu on this manual.

Many of the functions of the PVR are available from the **Main** Menu. Press

button to open it.

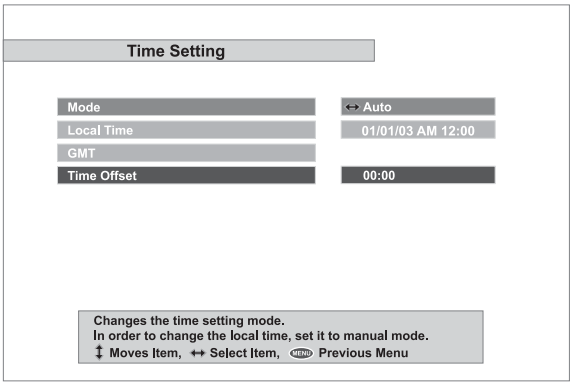


System Setting



Time Setting

The exact local current time can be adjusted by using the **GMT**, the **Time Offset** and the **Mode** sub menus.



A. Mode

By using V- , V+ buttons, you can select one of the **Auto**/**Manual** modes. The **Auto** mode updates the time settings automatically by the GMT received from the broadcast and the **Time Offset** you have inserted. The **Auto** mode is recommended. If **Auto** mode is set, British Summer Time is automatically set.

B. Local Time

The Local Time is adjustable only when the Mode is in the **Manual** mode. Adjust the current time, if necessary, by using the numeric buttons and V- , V+ buttons.

C. GMT

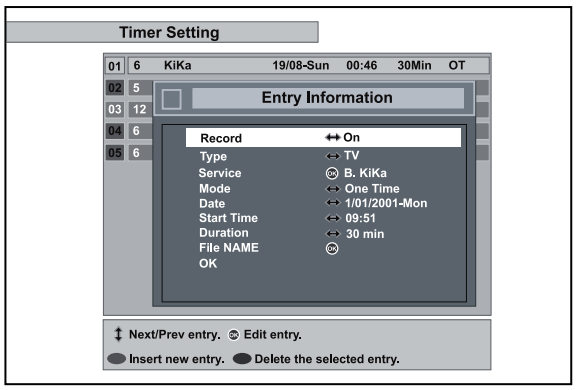
GMT is referred to the standard time of Greenwich. It cannot be changed.

D. Time Offset

The current time of the local area can be inserted. In another words, insert the time difference of the local time zone from the GMT. For example, if the local area is Seoul (the time difference from the GMT is 9), insert 9:00. The time is adjustable by using V- , V+ buttons, 15 minutes at a time.

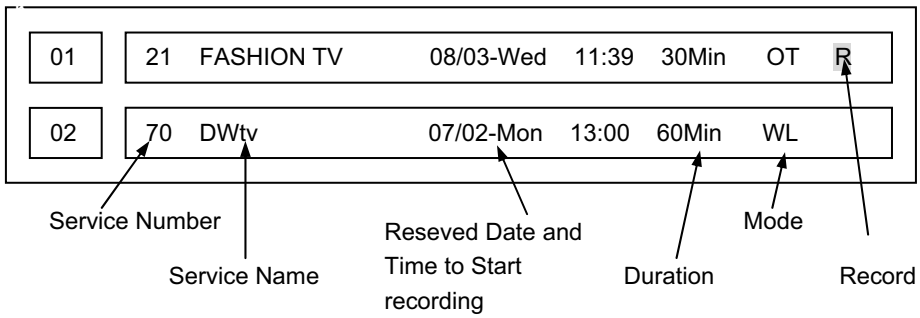
Caution : British Summer Time is available when **Auto** mode is set.

Timer Setting



MENU OPERATIONS

To insert new entry of **Timer Setting**, press (Red) Button. Press button to edit the entry, and press (Green) button to delete the selected entry.
There are **Record ON** and **OFF** modes in **Timer Setting**.

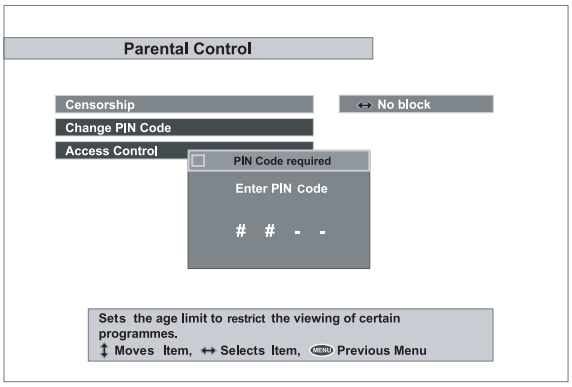


A. Record ON : This function is used for the delayed recording to the HDD of PVR.

- **Type** : Select TV or Radio by pressing , button.
- **Service** : Select the service to be reserved for recording by pressing button.
- **Mode** : By using , buttons, select one among **One Time**, **Everyday**, **Every Weekend**, **Weekly**, and **Every Weekday**.
- **Date** : Select the recording start date by pressing , buttons.
- **Start Time** : Select the recording start time. , buttons and 0 – 9 buttons are available.
- **Duration** : Select the recording duration by pressing , buttons.
- **File Name** : To change file name as you want, press button. The keyboard will appear.
- **OK** : To confirm the setting for the reserved recording, press button.

B. Record OFF: It is a useful function for reserved recording to a VCR or for wakeup function like VCR Timer. If the **Record** item is set to **Off**, the PVR wake up and play it by the reserved conditions, but does not record it to the HDD of PVR.
For details, refer to the explanation of **Record ON**.

Parental Control


Parental Control
Censorship
↔ No block
Change PIN Code
Access Control
PIN Code required
Enter PIN Code
- -
Sets the age limit to restrict the viewing of certain programmes.
↕ Moves Item, ↔ Selects Item, MENU Previous Menu

Password to various menus can be configured. The PIN Code box will automatically appear when this menu is selected. The default PIN Code is **0000**.

A. Censorship

The **Censorship** item blocks programs according to each specific setting.

Use V-, V+ buttons to select the items below.

No Block : Access to everyone.

Total Block : Access to no one without PIN code.

If the service is limitation free, the block function will not work.

4~18(age): Inaccessible for viewers within each minimum age limit if a maturing rating of the event is same or lower than the age limit.

In case of inaccessible, the STB asks the PIN Code and check the age limit.

B. Change PIN Code

Go to the **Change PIN Code** item to configure new PIN Code. Press OK/LIST button, then a box will appear on the screen. Enter the PIN code by using the numeric buttons on your RCU.

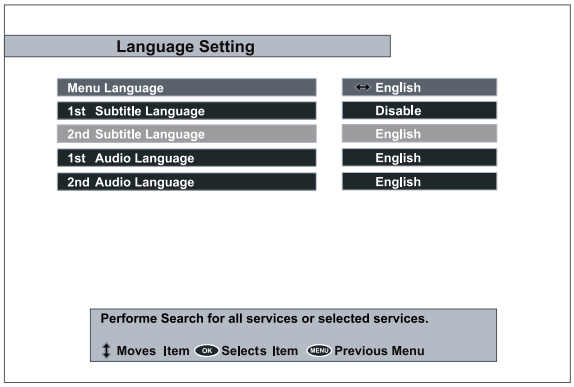
C. Access Control

The **Access Control** menu controls access to following items: **Time Setting**, **Language Setting**, **A/V Output Setting**, **Organizing Services** , **Organizing Favorites**, **Installation and IRD Lock**. Press V-, V+ buttons to **Locked**/**Unlocked** the access.

Locked means controlling the access to the specific menus with the PIN Code system. The default PIN Code is **0000**.

Language Setting

There are many languages available for the menu.



A. Menu Language

It is an item for changing the language of the Main menu.

Select the language that the menus will be shown in.

* The supported language can be changed without any notice.

B. Subtitle Language

It is an item for changing the language of the subtitle. As long as the services support it, the subtitle language is changeable by pressing Opt button on your RCU and select **Subtitle Track** menu.

* The supported language can be changed without any notice.

Caution : To activate interactive service, language must be set to Disable in the Subtitle Language item.

C. Audio Language

It is an item for changing the language of the Audio.

If more than one audio language is transmitted, select the language that the audio will be supported in.

* The supported language can be changed without any notice.

A/V Output Setting

The PVR has many A/V Outputs. Control this menu properly according to external components connected to the PVR. Configurations concerning Audio and Video can be made here.

A. TV Type
Select your TV standard. For automatic **PAL**/**NTSC** selection, set it to Multi.

B. Video Output
Select the mode of Video output among **RGB, S-Video, YUV** and **CVBS** on TV SCART by using V-, V+ buttons.

C. VCR SCART Type
Select the VCR SCART type either Standard or **External A/V**. In case of **External A/V**, the source of TV SCART Output will be selected between VCR SCART input and internal AV by pressing button on the RCU. In case of **Standard**, it will be done automatically by the SCART functionality.

D. TV Aspect Ratio
Select your TV screen format. Select **4:3** or **16:9** mode by using V-, V+ buttons.

E. 16:9 Display Format
If you have a TV set with the 4:3 picture format and transmission is in 16:9, you can select the display format. Select the **Letter Box** or **Center Extract** by using V-, V+ buttons.

F. Sound Mode
It allows you to configure the sound mode. Select the **Stereo, Mono**, **Left** and **Right** mode by using V-, V+ buttons. The Sound mode is configurable later on by pressing Opt button on your RCU and select **Sound Track** on the window.

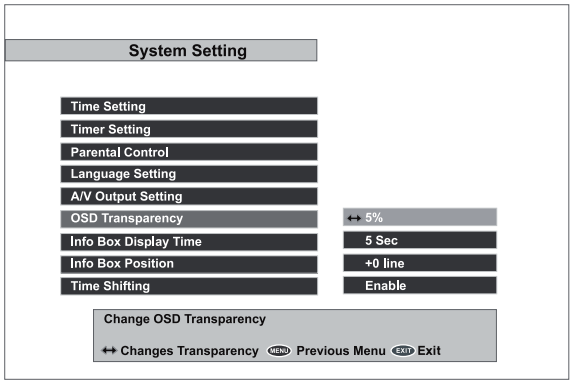
G. RF Type
When the PVR is connected to the TV by an RF cable, you may need to select the correct TV standard system. Select the **PAL G**, **PAL I**, **PAL K, NTSC-M** mode by using V-, V+ buttons.

H. RF Channel

Select a RF channel by using V-, V+ buttons. The default RF channel is CH36.

When you change the RF channel number, you must also change to the same value on the TV. If you do not, there will be no picture and sound.

OSD Transparency



Adjust the OSD transparency of all the menus. The available levels are ranging from **0%** to **50%.**

Info Box Display Time

Adjust the time-out of the Info Box. Set the period of time that the Info Box is displayed on screen. The adjustable time is **0** to **30** seconds, **No info box** and **Never Hide.**

Info Box Position

Adjust the position of the Info Box. It allows you to change the position by using V-, V+ buttons.

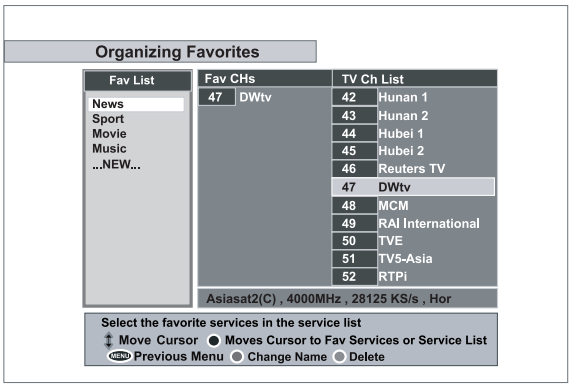
Time Shifting

To enable the time shifting function, select **Enable.**

If the Time Shifting is enabled, the PVR records the current service in live. And, you can take advantage of the time shifting function.

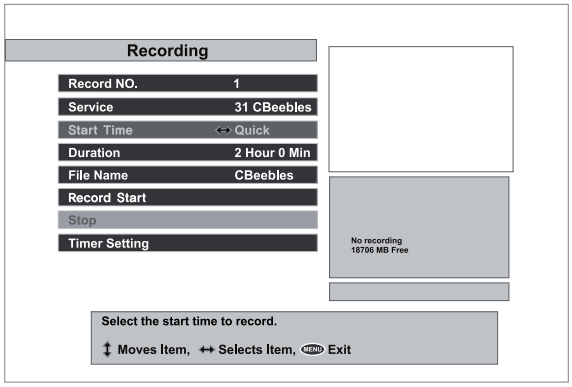
To disable time shifting function, select **Disable**. If you don't want to use time shifting function or reduce the power consumption, let the time shifting disable .

Organizing Favorites



This mode is helpful in adding and deleting services to and from the favorite group. Under the menu **Organizing Favorites**, there are three different modes:
Fav List , **Fav Services** and **TV** or **Radio Service List.**
On the **Fav List** mode, four standard lists are selected as the default menus: **News**, **Sports**, Movie and **Music**. Up to 30 lists including these lists can be added and renamed. When deleting a service, select a service in the **Fav Services** section and press the assigned button on the help message.
To add services into **Favorites**, locate the cursor to the desired service in **Service List** and press OK button. To delete a service from **Favorites**, locate the cursor to the service in **Fav Services** and press OK button.

Recording



To record the service you want, you have to set the following options. You can record the service immediately. To reserve a recording, you have to use **Timer Setting** function in System Setting at Main menu. You can go to the **Timer Setting** menu directly by selecting **Timer Setting** item in this menu, too.

A. Record NO.

Two services can be recorded simultaneously. You can distinguish between the two records by this Recording NO. Press V- , V+ button to select **Record NO.1** or **2**.

B. Service

Press OK LIST button to display the service list. Select a service to be recorded.

C. Start Time

There are two recording modes.

To record the selected service immediately, select the **Quick** mode.

To record current event including the data in the time shifting buffer, select **Current Event** mode. The **Current Event** mode is valid only when the event information of the service exists.

D. Duration

To change the duration of the recording time, press V- or V+ button.

E. File Name

To change the file name of the service to be recorded, press OK button at this item. You can change the file name by keyboard on screen.

F. Start

To start recording immediately, press OK button at this item. For reservation you may use **Timer Setting** in **System Setting** menu.

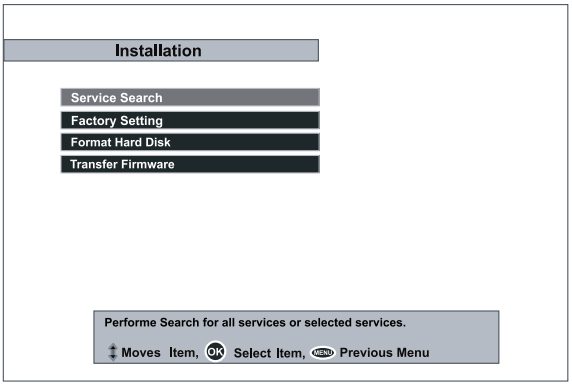
G. Stop

To stop recording immediately, press OK button at this item.

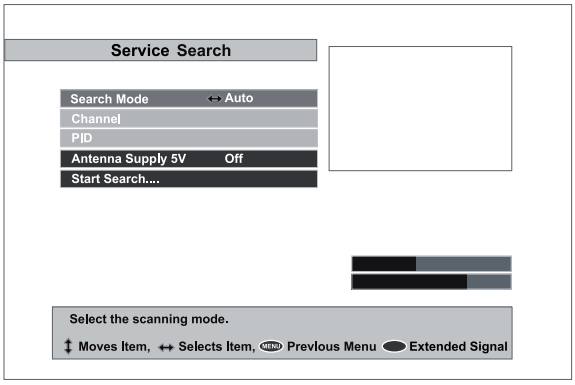
H. Timer Setting

Press OK button at this item to go to the **Timer Setting** menu directly.

Installation



Service Search



A. Search Mode

There are 3 search modes, **Auto**, **Manual** and **Advanced**. The **Auto** mode enables you to search all the services you can receive. The **Manual** mode enables you to search the services in the channel you want. On the **Advanced** mode, you can search the service by setting the **Audio PID**, **Video PID** or the **PCR PID**.

B. Channel

The available Channels are VHF 5~12 & UHF 21~69, which is based on the European specification. The Channel item is valid on Manual mode and Advanced mode

C. PID

This item is valid when the Search Mode is set to **Advanced** only.

Press OK button to enter Video, Audio and PCR PID's.

1) Video PID

Insert the Video PID by using the numeric buttons on your RCU.

2) Audio PID

Insert the Audio PID by using the numeric buttons on your RCU.

3) PCR PID

Insert the PCR PID by using the numeric buttons on your RCU.

4) SAVE

To ensure the above Video, Audio and PCR PID change, press OK button at this item.

D. Antenna Supply 5V

When using an active antenna, it should be set to **On** to supply power to the Amplifier of the Antenna. (5V/max 100mA)

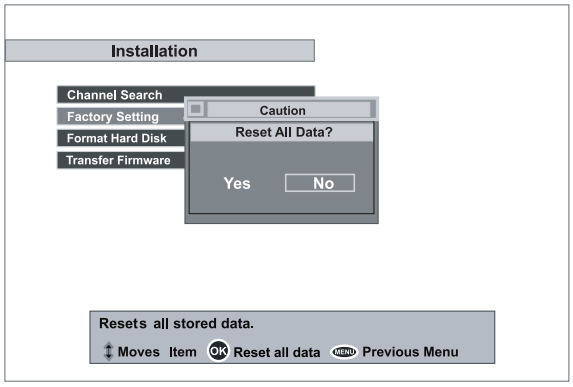
E. Start Search...

To start the searching process, press OK button at this item.

To stop the searching process on the way, press either the MENU button or the EXIT button. This menu will be shown as long as the PVR is searching for services. All services found will be listed in two colu mns on the screen with TV services in one column and Radio services in the other. Please note that the search procedure may take a few minutes.

When the search procedure is completed, the screen will show how many TV and Radio services have been found. Press OK button to save the services.

Factory Setting



All the stored data can be reset just like it was manufactured.

Format Hard Disk

To format the HDD in PVR, Press OK button at this Item.

Formatting Hard Disk will delete all the data and the files recorded in HDD permanently. If a new HDD is installed, it should be formatted because the file structure of PVR is different from others.

You can not use the Time shifting, Recording and playback functions with an unformatted HDD.

Transfer Firmware

A. Transfer Program to Other IRD

It is used to transfer PVR firmware to other PVR for upgrading the PVR.

Notes: Please proceed this menu with connecting the PVR of same model and same specification.

B. Transfer Data to Other IRD

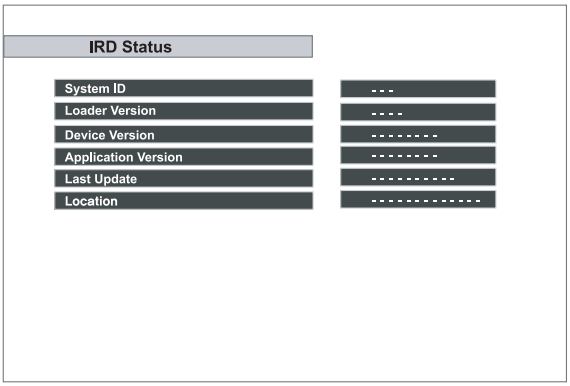
It is used to transfer PVR Data such as service information to other PVR for upgrading the PVR.

Notes: Please proceed this menu with connecting the PVR of same model and same specification.

Information

You can check the IRD(PVR) version and refer the calendar.

IRD Status

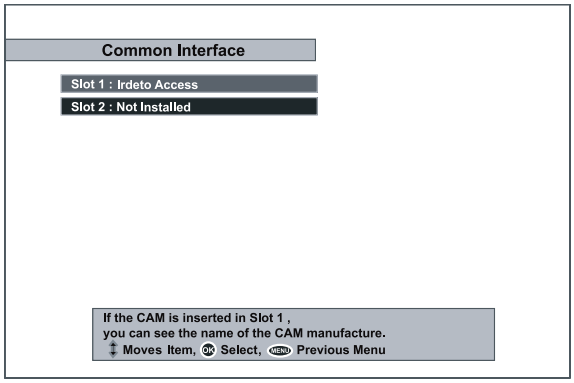


Check the PVR's system information here. It shows the System ID, Loader Version, Device Version, Application Version and Last Update.

Calendar

Press V- or V+ button to select the year. Press P+ or P- button to select the month.

Common Interface

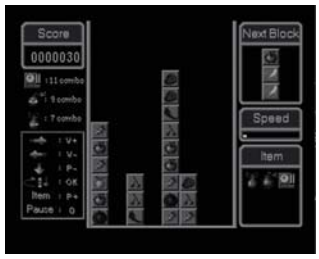

Common Interface
Slot 1 : Irdeto Access
Slot 2 : Not Installed
If the CAM is inserted in Slot 1 ,
you can see the name of the CAM manufacture.
Moves Item, OK Select, MENU Previous Menu

The menu differs according to each inserted CAM. If the module has not been installed yet, the phrase **Not Installed** will be indicated.

Game

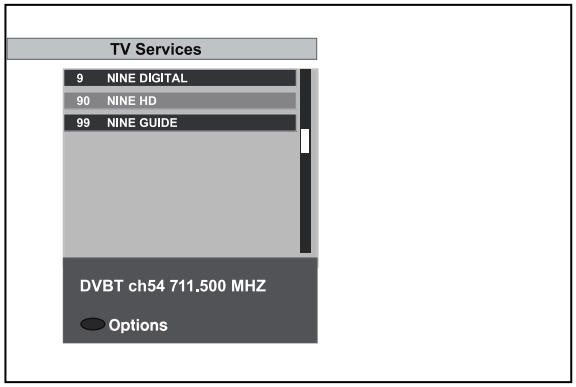
ExBlock

Bomb Hexa



FUNCTION GUIDE

Service List



Press OK button to see the **Service List**. The **Service List** displays as follows.

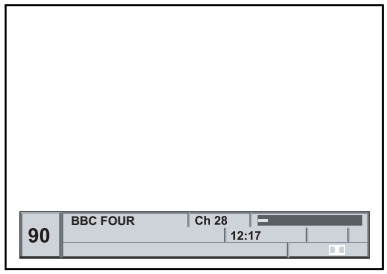
- Service provider. (It can be displayed by pressing LIST button.)
- Scrambled Mark by **$** .
- (Red) button: Display the options. You can use this options by pressing V-, V+ or OK button.
  - **Show Provider** : Displays the services by service provider.
  - **Rename** : Renames the marked service.
  - **Lock** : Makes the marked service **Unlocked** or **Locked**.
  - **Delete** : Deletes the marked service.
  - **Add to FAV** : Adds the marked service to the FAV List

Notes : By pressing LIST button twice on the RCU (Remote Control Unit) or selecting **Fav LIST** item after you press Opt button, you can go directly to the **Fav List**.

Information Box

Press i button on the RCU to see the program information. The Information box displays as follows:

. Service Number
. Service Name
. Detailed Program Information
. Signal Level and Quality
. Tuner Information
. Information of subtitle and / or teletext
. Parental Lock



You can hide the Information Box by pressing i button.

A. Live picture

Service Number	Service Name	Freq / BW	Signal Strength	
	Event Name	Time Information	CAS, Dolby Subtitle, Teletext	Parental Lock Mark
	Event Description	Start Time ~ End Time		

You can see the Current/Next event by pressing V- , V+ button in the information box. To control the volume in the information box, you have to press V- , V+ button two times without interval. You can see extended information of the event by pressing i button once more.

B. Playback

▷	File Name	Freq / BW	Progress Bar	
	Event Name	Time Information	CAS, Dolby Subtitle, Teletext	
	Event Description	Duration		

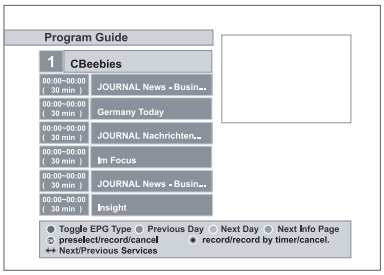
C. MP3

▷	Title	Bitrate	Progress Bar	
	Artist	Time Information		
	Album	Duration		

EPG (Electronic Program Guide)

To display the information about currently being broadcasted as well as those that will be broadcasted next, press GUIDE button on the remote control unit.

If EPG is available on programs, you will see the detailed description of the programs, start/end time and programs schedules etc.


Program Guide
1 CBeebies
00:00~00:00 (30 min) JOURNAL News - Busin...
00:00~00:00 (30 min) Germany Today
00:00~00:00 (30 min) JOURNAL Nachrichten...
00:00~00:00 (30 min) Im Focus
00:00~00:00 (30 min) JOURNAL News - Busin...
00:00~00:00 (30 min) Insight
Toggle EPG Type Previous Day Next Day Next Info Page
preselect/record/cancel record/record by timer/cancel.
Next/Previous Services

P+ , P- buttons will be used to move program and to see next program schedules.

V- , V+ buttons will be used to switch the service.

OK LIST button makes the reservation for the next program.

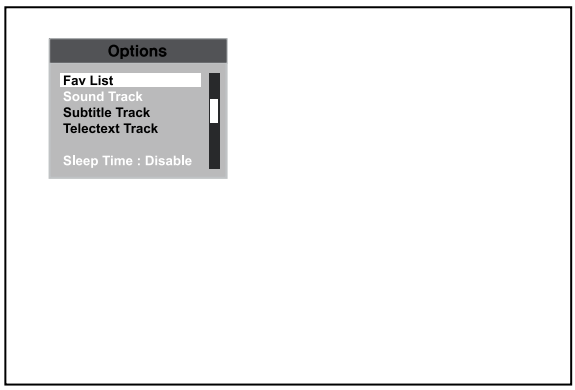
i button shows extended information of the event.

CH button will change the contents of EPG between TV and Radio services.

button switches the EPG from Single Service to Multi Service and in opposition.

Option Button

Display **FAV List**, **Sound Track, Subtitle Track, Teletext Track** and **Sleep Time** modes pressing Opt button. If **multifeed** is available in the service, **Multifeed** icon will appear.



Fav List

By pressing FAV button twice on the RCU (Remote Control Unit) or selecting **Fav LIST** item after you press Opt button, you can go directly to the **Fav List**. Fav List shows the list you have already selected in the **Organizing Favorites**. If you want to change channels on Fav List, please go to the **Organizing Favorites** and reorganize the **Fav List.**

Subtitle

You can choose a language of subtitle in the **Subtitle Track** by using Opt button on the RCU. If the broadcaster provides subtitles, you can see symbol in the Information Box.

Caution : To activate interactive service, language must be set to **Disable**.

Teletext

If the broadcaster supports teletext, you can see symbol in the Information Box. There are VBI insertion mode and software emulation mode in teletext. In the VBI insertion mode, which is always on, you can watch the teletext with your TV using the

RCU of your TV. To watch teletext with VBI insertion, your TV must support teletext.
In the software emulation mode, you can watch the teletext even though your TV does not support teletext. You can watch the teletext using the RCU of PVR.
Press Opt button and select **Teletext Track** to watch the teletext with software emulation mode.
Press **EXIT** (EXIT) button to escape from teletext.

Sound Track

You can choose a language of soundtrack by pressing Opt button and selecting **Sound Track** when a broadcaster supports various languages of soundtrack.
Also, it is possible to choose a mode among Stereo, Mono, Left and Right using V-, V+ buttons. Opt button is used for multifeed function, too. If the multifeed is available in current service, Multifeed Track will be displayed first. You can change the display to **Options** selection menu by pressing Opt button once more.

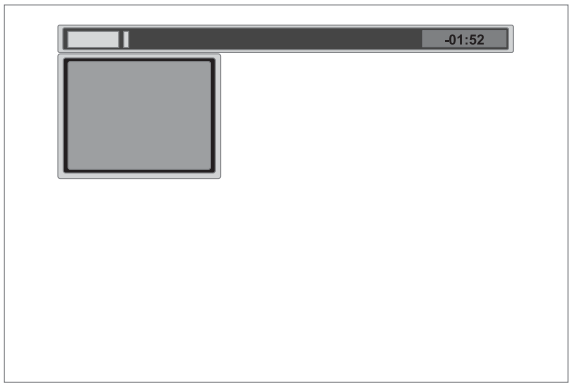
Multifeed

If **Multifeed** is available in the service, **Multifeed** Icon ( ) will appear at the right side of the Information box. If available, the **Multifeed Track** and **Options** are toggled by Opt button. It is possible to choose one of the multifeed services.

Sleep Time

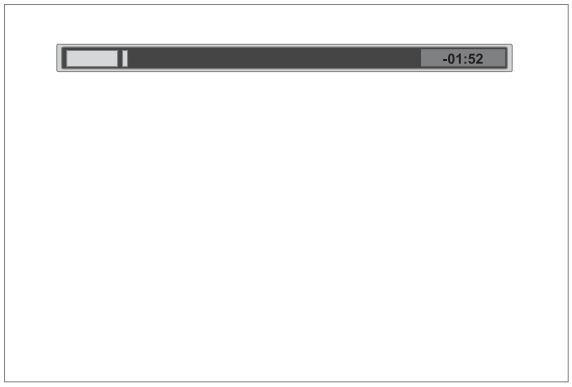
At the sleep time, the power is automatically turned OFF and the PVR goes to the STANDBY mode. You can adjust 10 minutes at a time up to 120 minutes.

Time Shifting



1. To use **Time Shifting** function, the **Time Shifting** option should be enabled.
   To find the Time Shifting option menu, follow the steps below.
   Main Menu → **System Setting** → **Time Shifting** → **Enable**
2. Press button to display Time Shifting progress bar. You have to press button once more to display Time Shifting progress bar during Trick mode. (such as Fast Forward, Reverse Playback, Slow motion)
3. To go to the desired playback position, press V-, button or V+, button.
   This function is valid while the Time Shifting progress bar is displayed.
4. To remove the Time Shifting progress bar at once, press OK, EXIT or button.
5. To go to the live video, press button.

Recording while Time Shifting



1. Press button to display Time Shifting progress bar.
2. To go to the desired position, V+ , button or V- , button.
3. Press button to start recording.
4. The recording will be started from the selected position.
5. Press button to stop Time Shifting.
6. Press button once more to stop recording.

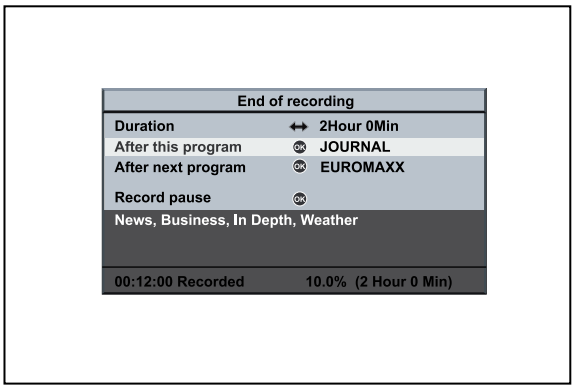
Caution : If the recording time is less than about 1 minute, the recorded file will not be saved.

Recording, Checking and Editing the reserved delayed recording

To record services, refer to the following steps. There are four kinds of recording references.

Caution : If the recording time is less than about 1 minute, the recorded file will not be saved.

Immediate Recording by RECORD button



A. Recording

Press button to record the service you are watching. To specify the stop time, go to **Recording** menu and modify **Duration** item. To go to the **Recording** menu, press button once more or go to **Recording** item of Main Menu.

B. End of recording

To see **End of recording**, press button once more in the service of recording or pause. This function can be used for duration of the recording time, recording by the event, record pause etc.

1. Duration

To change the duration of the recording time, press V- or V+ button.

2. After this program

It records only current event and stops.

3. After next program

It records to next event and stops. Also, the file is saved in a different name.

4-1. Record pause

To pause recording, select **Record pause**.

4-2. Record continue

To restart recording from the condition of **Record Pause**, select **Record continue.**

Note : If you would like to continue recording in pause, press button in order to see **End of recording Window**. Then, continue item will appear.

C. Checking and modification

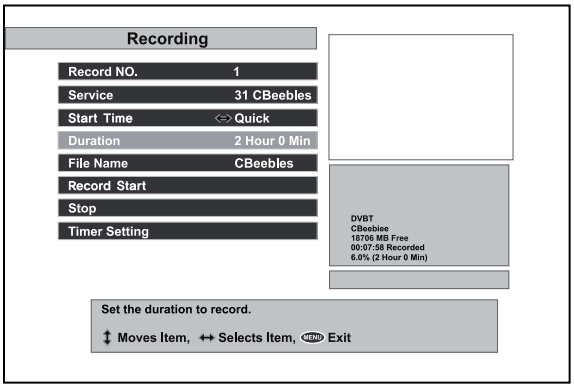
A **Recording Icon** ( ) will be displayed on the upper rightmost of the TV screen for several seconds if the recording is initiated. Press button to see the **Recording Icon**.

To check and modify the recording options, go to **Recording** menu.

D. Stop

Press button and select the service to stop the Recording by confirming button. If only one service is being recorded, it is possible to stop the recording by pressing button twice.

Immediate Recording by Menu Selection



*** Precaution (Dual Recording)**

Before starting recording on the Menu, you have to select one of the **record NO**. There are **Record NO.1** and **2** to distinguish between the two records for dual recording. In case of one service is recorded at **Record NO.1**, only **Duration** and **Stop** item of **Recording** menu will be enabled. But, all the sub-menu of **Record NO.2** will be enabled.

A. Recording

To go to **Recording** menu, press MENU button and select **Recording** item by pressing OK button. Select the options that you want to record with. Select **Start** item and press OK button. For detailed information, refer to the explanation of **Recording** menu in Menu operations.

B. Checking and modification

A Recording Icon (◯) will be displayed on the upper rightmost of the TV screen for several seconds if the recording is initiated.

To check and modify the recording options, go to **Recording** menu.

C. Stop

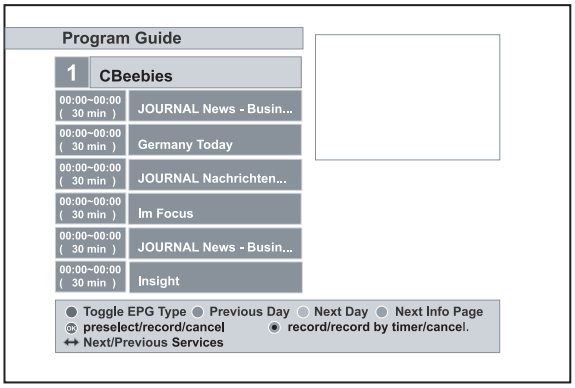
Press ■ button and select the service to be stop the Recording by pressing OK button.

Otherwise, go to **Recording** menu and press OK button at ■ item.

Delayed Recording

See [**System Setting -> Timer Setting**] for more details on Delayed Recording.

Recording by EPG


Program Guide
1 CBeebies
00:00~00:00 (30 min) JOURNAL News - Busin...
00:00~00:00 (30 min) Germany Today
00:00~00:00 (30 min) JOURNAL Nachrichten...
00:00~00:00 (30 min) Im Focus
00:00~00:00 (30 min) JOURNAL News - Busin...
00:00~00:00 (30 min) Insight
Toggle EPG Type
Previous Day
Next Day
Next Info Page
preselect/record/cancel
record/record by timer/cancel.
Next/Previous Services

A. Record

Press GUIDE button to display EPG. Select a service that you want to record, and press button. Instead of button, two times pressing of OK button is valid for delayed recording. In these cases the Recording mark (**R**) will be displayed.

Pressing the button once more at the service can modify the parameters of delayed recording. If you press the button in the modification window, the modification will be canceled.

B. Checking and modification

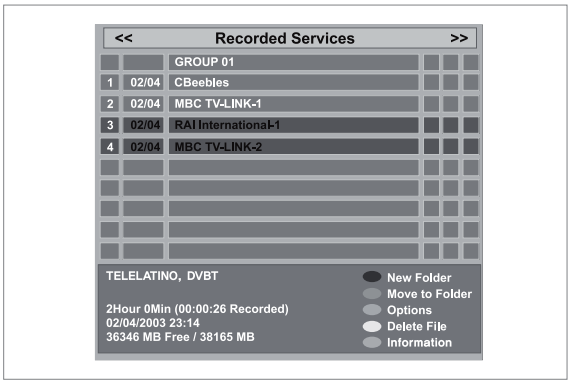
Press GUIDE button to display EPG. The reserved services for delayed recording will be marked with a Recording mark (**R**) or Reserved Event mark (**P**).

Pressing the rec button once more at the service can modify the parameters of delayed recording. If you press the button in the modification window, the modification will be canceled.

C. Cancel

Press GUIDE button to display EPG. To cancel a reservation of delayed recording, select the service you want to cancel and press OK button once or twice till the recording mark disappears on the service.

Playback a Recorded Service



1. Press button to display the recorded service list.
2. You can use several useful editing functions at **Recorded Services** menu as followings.
   A. **New Folder** : Press (Green) button to make new folder.
   B. **Move to Folder** : Press (Yellow) button to move the Service to a folder.
   C. **Option** : By pressing (Blue) button, you can use optional functions such as
      - **Sorting by Alphabetic, Size, Time.**
      - **Rename**
      - **Lock**
   D. **Delete File** : Press (White) button to delete the recorded service.
   E. **Event Info** : Press button to display extended event information.
3. Select a recorded service at the list.
4. Press button to start playback.
5. Press button to display Time Shifting progress bar. You have to press button once more to display Time Shifting progress bar during Trick mode. (such as Fast Forward, Reverse Playback, Slow motion)
6. To go to the desired playback position, press V+, button or V-, button. This function is valid while the progress bar is displayed.
7. If you enter the position by percent with numeric button of RCU, the playback position will be moved to the point. This function is valid while the progress bar is not displayed.

* **Successive Playback of Services**

Press (Red) button to number the services among the recorded services list and press or button to playback the multi-services in sequence automatically.

This function is very convenient for you to descramble the pay TV service with proper CAM module and smart card. You can descramble the scramble services and copy it while you are not using this PVR.

*** MP3 and TAP**

Press , buttons at recorded service list to go to MP3 files and program files(TAP).

Stop

1.This function is available for playback.

2.To stop playback, press button.

3.You can stop the recording in the recorded service list, too. To stop the recording, press button at the selected recording file.

Pausing

To pause the live picture or playback, press button.

Press button again or button to quit pausing.

1. Pause from live video

If the PAUSE is kept more than 10 seconds with enabled Time Shifting mode, the live picture is changed to time-shifted playback. The video continues from the paused image when resumed from PAUSE.

2.Pause from Time Shifting

The video continues from the paused image when resumed from PAUSE.

3. Pause from Playback

The video continues from the paused image when resumed from PAUSE.

Slow Motion Playback

1. To playback in slow motion (without sound), press the button.
2. Slow motion speed can be adjusted by pressing the button repeatedly.
3. There are 3 steps (1/2, 1/4, 1/8) in slow motion playback.
4. Press button to resume playback with normal speed.
5. The slow motion function is available for the playback and the time-shifted playback.

Fast Motion Playback

1. If there is a Time Shifting or Playback progress bar, remove the progress bar by pressing button.
2. Press button for fast motion playback. To change the playback speed, press button repeatedly.
3. There are 3 steps (2, 4, 6) in fast motion playback.
4. Press button to resume playback with normal speed.
5. The fast motion function is available for the playback and the time-shifted playback.

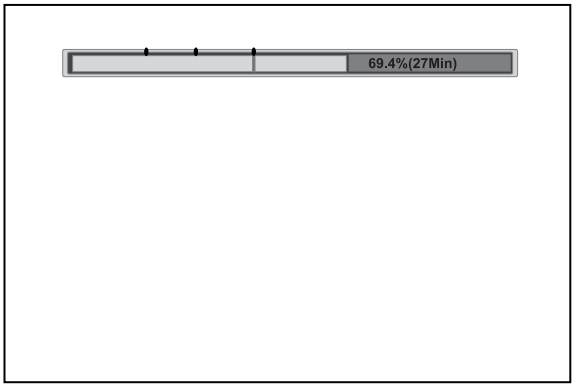
Fast Forwarding and Rewinding

1. Press button to display Time Shifting or Playback progress bar.
2. To go to the desired playback position, press button or button. This function is valid while the progress bar is displayed.
3. To remove the progress bar at once, press button.

Reverse Playback

1. If there is a Time Shifting or Playback progress bar, remove the progress bar by pressing button.
2. Press button for reverse playback. To change the playback speed, press button repeatedly.
3. There are 3 steps (1,2,3) in reverse playback.
4. Press button to resume playback with normal speed.
5. The reverse playback function is available for the playback and the time-shifted playback.

Bookmark



Bookmark function is available while the play bar is on the screen and you can display the playbar by pressing button. You can jump to a position directly by bookmark function in playback and time-shifted playback. To search positions very quickly and easily, use bookmarks.

It is impossible to use the bookmark in the following conditions.

- Timeshifting is disabled and you are watching live picture.
- You are recording 2 services, and you are watching the other service.

1. Add a bookmark

To add a bookmark, press (Green) button at the position you want to add it. You can make the bookmark at maximum 64 positions.

2. Go to a bookmark

Press (Yellow) button to jump to the next bookmark. Then, the PVR plays from the book marked position.

3. Delete a bookmark

To remove a bookmark, you have to display the progress bar by pressing button. Select the bookmarked position by (Yellow) button and press (Green) button.

4. 30 seconds forward

If there is no present bookmark, the PVR plays every 30 seconds forward by pressing (Yellow) button.

Recording The Descrambled Live Service

1. Select the live picture you want to record. Descramble the service with a proper CAM and smart card. The live service should be decoded well with the proper CAM and smart card.
2. Start recording according to the recording procedure.
3. During recording, don't change the service neither try the time shifting function.

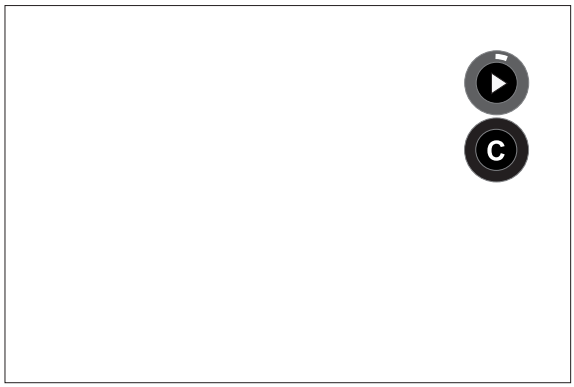
Caution : If there is any disturbance such as service changing or time shifting during recording, the recorded file will be changed to the scrambled format from this position. If the recording time is less than about 1 minute, the recorded file will not be saved.

Descrambling Recorded Services

1. Select and playback a service you want to descramble. Descramble the service with a proper CAM and smart card. The playback service should be decoded well with the proper CAM and smart card.
2. Press ▶ button to display Playback progress bar.
3. To go to the desired position, press ◀◀ button or ▶▶ button.
4. Start playback and the picture should be descrambled with a proper CAM and smart card. The fast/slow motion descrambling is possible by fast/slow motion playback.
5. Start recording by **RECORD** (●) button.
6. The video displayed on TV will be recorded.
7. Press **STOP** (■) button to stop recording.
8. Press **STOP** (■) button again to stop playback.
9. You can playback the multi-service(Pay TV) in sequence. For detailed explanation, refer to **Playback a Recorded service**.

Caution : If the descrambling time is less than about 1 minute, the recorded file will not be saved.

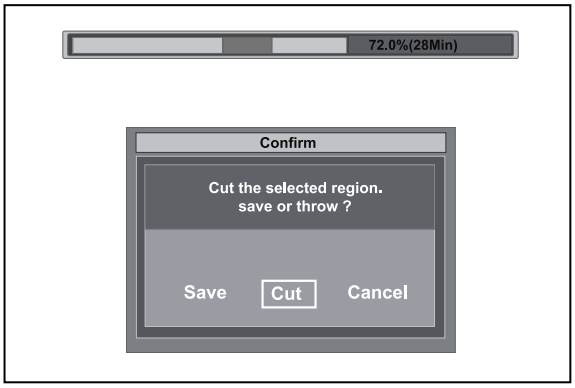
Copying from Recorded Services



1. Select and playback a service to copy.
2. Press button to display Playback progress bar.
3. To go to the desired position, press button or button.
4. Start playback the recorded video you want to copy. The fast/slow motion copying is possible by fast/slow motion playback.
5. Start copying by button.
6. The video displayed on TV will be copied.
7. Press button to stop copying.
8. Press button again to stop playback.

Caution : If the copying time is less than about 1 minute, copying will not be done successfully. It is recommended not to change the playbck speed.

Cut Out / Save Selected Region



1. Start playback a recorded service.
2. Press button to display Playback progress bar.
3. To specify one end of region, press the (White) button with the progress bar.
4. Move the cursor by pressing (or V+) or (or V-) button.
5. Press (Blue) button to cut or save the selected region. Then, a message box appears.
6. To cut out selected region, press the button at **cut** item in the message box.
7. To save the selected region, press button at **save** item in the message box.

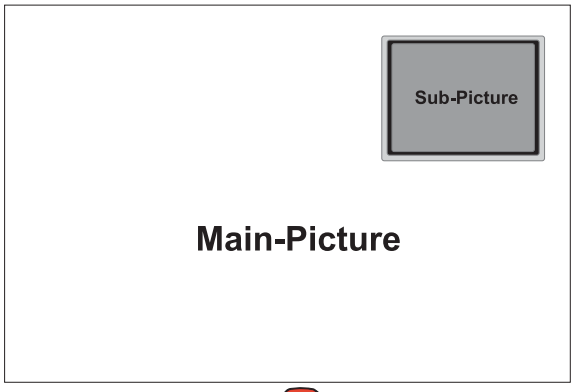
Time Shifting while Recording

During single recording, Time Shifting is possible. But, if you are recording 2 services at the same time, Time Shifting is possible only in the recorded service.

Zapping while Recording

For the tuner being recorded with, all the services in the same service can be selected.
For the other tuner, all the scanned services can be selected.

Picture In Picture (PIP)



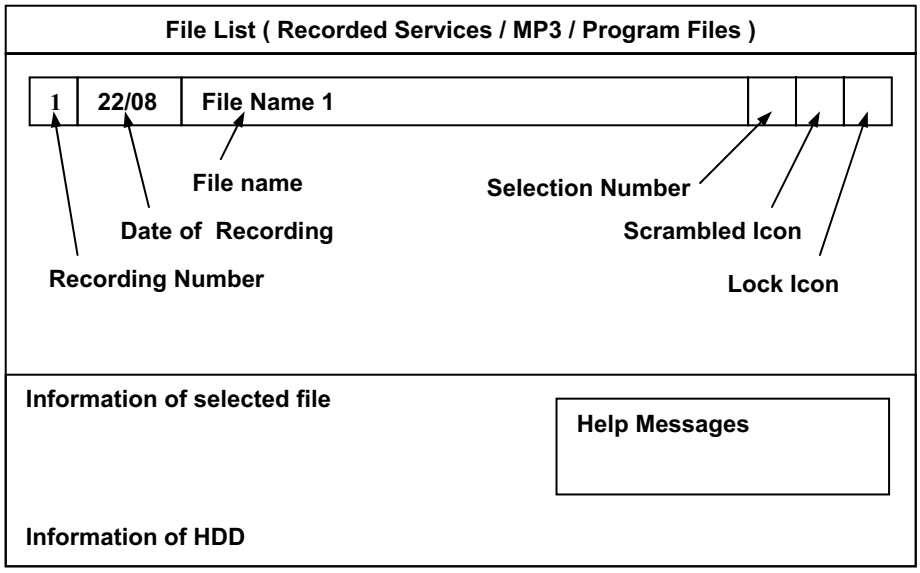
1. Press button to display PIP. Press button repeatedly to change the position of sub-picture or to remove the sub-picture.
2. At PIP screen, press Sat( ) button to exchange main-picture with sub-picture.
   Remarks: It is not possible to exchange main-picture with sub-picture when a recorded service is in playback in main-picture and a live service plays in sub-picture.
3. To display the service list of main-picture, press OK button. You can select a service in the service list.
   To display the service list of sub-picture, press ( ) button.
4. If the both of main and sub-picture are scrambled, only the main-picture will be played.

Dual Recording

1. Press button to start Recording.
2. You can use the Time-shifting function while recording another service. It is possible to record two services at the same time, too.
3. To record the 2nd service, press button at the service you want to record.
4. You can check the status of recordings in the recorded service list. To check it, move the cursor to the file that is being recorded.
   You can stop the recording there, too. To stop the recording, press button at the selected recording file.
5. It is possible to stop the recording in the live picture. To do it, press button and press OK button after selecting the recording by P+, P- button.

File List

The file list has 3 lists. They are **Recorded Services**, **MP3** and **Program Files**. The lists are selected by , buttons. The File list is displayed by pressing button.



Recorded Services List

The file list is displayed by pressing button. The file list of **Recorded Services** can be selected by , buttons from other list.

1. You can see the file number, file name, date of recording, information of scramble, locking, Service name, event information, file size, HDD information, etc.
2. **Folder**
   A new folder can be made by pressing (Green) button. The new folder will be named as **GROUP #**. The name can be changed by (Blue) button. The keyboard will be displayed if you select the **Rename** there.

3. Move

Press (Yellow) button after selecting a file you want to move. The lists of Folders will appear. You can select a folder you want.

4.Delete

Press (White) button after selecting a file you want to delete. You have to confirm it to delete at confirmation box.

5. Sorting, Rename, Lock

Press (Blue) button to display option list. You can sort, rename and lock the selected file or folder. If a file is locked here, the **Lock icon** will appear in the file list.

6. Icons

Scrambled Icon

Icon (color)	Description
$ (Yellow)	Scrambled
$ (Yellow/Green)	Partially Scrambled
$ (Green)	Descrambled
None	Non-scrambled (FTA)

Lock Icon ( )

It means that the file is locked. To play the files you have to enter the PIN code.

7. Playback

To playback the selected file, press button or button.

8. Successive Playback of Services

Press (Red) button to number the services among the recorded services list and press or button to playback the multi-services in sequence automatically.

This function is very convenient for you to descramble the pay TV service with proper CAM module and smart card. You can descramble the scramble services and copy it while you are not using this PVR.

9. Successive copy of Services

Select the services you want to copy by pressing (Red) button. You can start copying by pressing button.

10. Event information

If there was Event information when the service was recorded, you can see the information by pressing button.

MP3 File List

The file list is displayed by pressing button. The file list of **MP3 files** can be selected by , buttons from other list.

1. You can download the MP3 files via USB from PC using Altair.exe.(You can get it from www.i-topfield.com) The list of MP3 files will be displayed here.
2. **Folder**
   A new folder can be made by pressing (Green) button. The new folder will be named as GROUP #. The name can be changed by (Blue) button. The keyboard will be displayed if you select the **Rename** there.
3. **Move**
   Press (Yellow) button after selecting a file you want to move. The lists of Folders will appear. You can select a folder you want.
4. **Delete**
   Press (White) button after selecting a file you want to delete. You have to confirm it to delete at confirmation box.
5. **Sorting, Rename**
   Press (Blue) button to display option list. You can sort, rename the selected file or folder.
6. **Play**
   To play the selected file, press button or button.
7. **Successive Playback of MP3 files**
   Press (Red) button to number the files among the file list and press or button to play the files in sequence automatically.
8. **Play by folder**
   To play the files in specific folder, select a folder and press button.
9. **Select Play mode**
   To select a play mode of MP3, press (white) button. There are **normal**, **repeat one** and **repeat all** modes.

Program File List

The file list is displayed by pressing button. The file list of **Program files** can be selected by , buttons from other list.

1. You can download the TAP(Topfield Application Program) via USB from PC using Altair.exe.(You can get it from www.i-topfiled.com).The list of the TAP will be displayed.
2. **Folder**
   A new folder can be made by pressing (Green) button. The new folder will be named as GROUP #. The name can be changed by (Blue) button. The keyboard will be displayed if you select the **Rename** there.
3. **Move**
   Press (Yellow) button after selecting a file you want to move. The lists of Folders will appear. You can select a folder you want.
4. **Delete**
   Press (White) button after selecting a file you want to delete. You have to confirm it to delete at confirmation box.
5. **Sorting, Rename**
   Press (Blue) button to display option list. You can sort and rename the selected file or folder.
6. **Run**
   To run the selected file, press button.
7. **Auto Run**
   If you want a program runs automatically when the PVR starts up, move the program to the **Auto Start** folder.
   If you are pressing the button when the PVR starts up, the program in the **Auto Run** folder will not run. Remove the program from the **Auto Run** folder if you do not want to auto run.

Progress Icon

There will be Icons during Playback, Time Shifting, Recording and Copying. They will be displayed for a seconds. To display it again, press i button.

Icon (color)	Description
(Red)	Recording. - Small Circle in the large circle means the current service you are watching is being recorded. - The number in the large circle means recording number. And, the service being recorded is not the service you are watching. - The outer circle mean displays the rate of progress.
(Green)	Playback. - The figure in the circle shows you the playback speed. - The outer circle displays the rate of progress.
(Red)	Copying. - The character **C** in the circle means copying. - The outer circle displays the rate of progress.

SOFTWARE UPGRADE AND PC INTERFACE

Software Upgrade

The PVR has stable and convenience software to use. But, to improve the PVR the new software of the PVR may be released.
Whenever a problem is found or functions are added or modified, the software in the PVR has to be upgraded to enjoy better function.
The latest news, software, utility, driver, product and manual will be found at Topfield website **http://www.i-topfield.com**

There are some methods to download the new software.
(a) PVR to PVR download via RS232C
    It is possible to download the firmware or service data from PVR to another PVR.
(b) PC to PVR download via RS232C
    You need the **TFD-down.exe** to download the software.
    Start download at PC and turn on the PVR.
(c) PC to PVR download USB
    You need to the **TFDN_USB.exe** to download the software.
    Start download at PC and turn on the PVR.

For more information, refer to the **Transfer Firmware** chapter of **Menu Operations**.

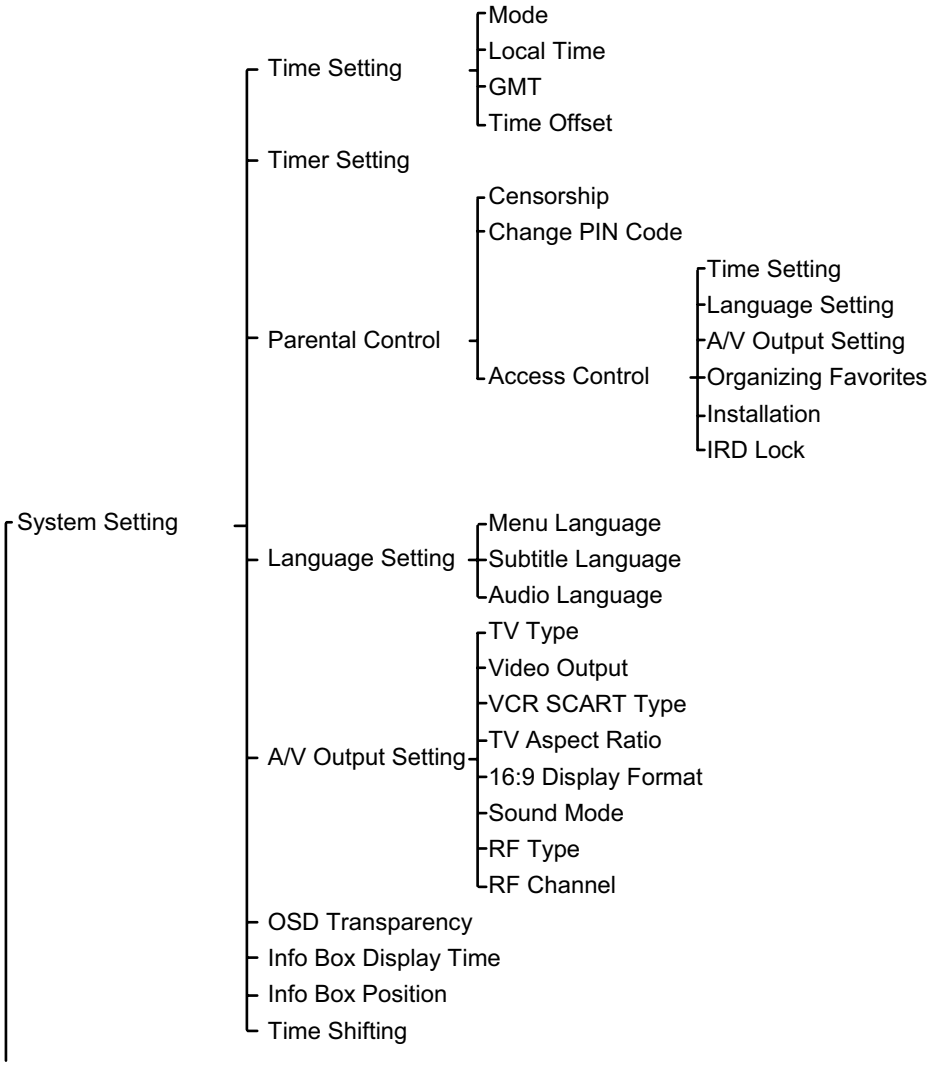
File download and upload via USB

You can upload or download the **TAP**(Topfield Application Program), MP3 and the recorded services to or from your PC. You need to the **Altair.exe** to enjoy it.

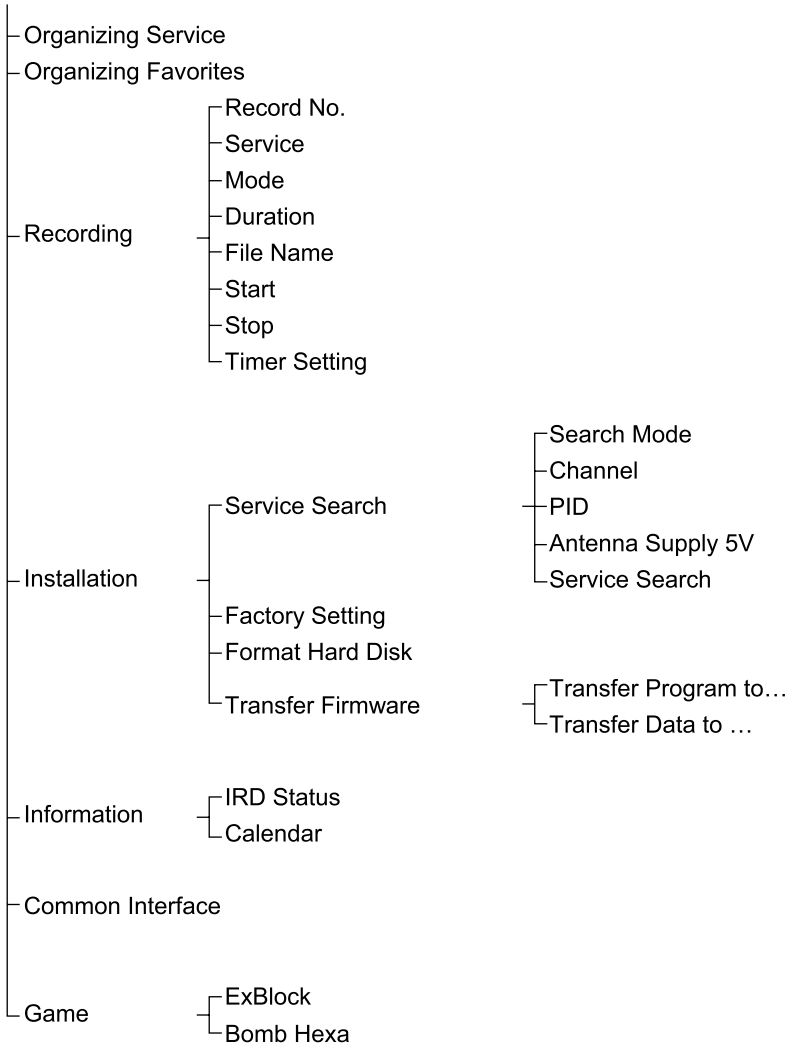
You can download the **TFD-down.exe, TFDN_USB.exe, Altair.exe** at Topfield website **http://www.i-topfield.com**

The **TAP** application can be developed and used by users. The users can make their own functions by **TAP**. Topfield does not confirm the **TAP** developed by users, and does not have any responsibility.

MENU MAP


System Setting
Time Setting
Mode
Local Time
GMT
Time Offset
Timer Setting
Parental Control
Censorship
Change PIN Code
Access Control
Time Setting
Language Setting
A/V Output Setting
Organizing Favorites
Installation
IRD Lock
Language Setting
Menu Language
Subtitle Language
Audio Language
A/V Output Setting
TV Type
Video Output
VCR SCART Type
TV Aspect Ratio
16:9 Display Format
Sound Mode
RF Type
RF Channel
OSD Transparency
Info Box Display Time
Info Box Position
Time Shifting

MENU MAP


Organizing Service
Organizing Favorites
Recording
Record No.
Service
Mode
Duration
File Name
Start
Stop
Timer Setting
Installation
Service Search
Search Mode
Channel
PID
Antenna Supply 5V
Service Search
Factory Setting
Format Hard Disk
Transfer Firmware
Transfer Program to…
Transfer Data to …
Information
IRD Status
Calendar
Common Interface
Game
ExBlock
Bomb Hexa

SPECIFICATIONS

Tuner & Channel Decoder

Item	Specification
2 Tuners	
Input/Loop through Connector	F-type, IEC 169-2, Female/male
Frequency Range	174 ~ 230MHz, 470 ~ 862MHz
Signal Level Input	-78 ~ -20dBm
Modulation	OFDM
Carrier Mode	2k and 8k hierarchical/non-hierarchical
Constellation	QPSK, 16 and 64 QAM
Guard Interval	1/4, 1/8, 1/16 and 1/32

MPEG Transport Stream A/V Decoding

Item	Specification
Transport Stream	ISO/IEC 13818-1 MPEG-2
Profile Level	2 x MPEG-2 MP@ML (PIP)
Aspect Ratio	4:3, 16:9, Pan & scan, Letterbox
Video Resolution	720 x 576
Audio Decoding	MPEG-1 Layer 1, 2 & 3

Main System

Item	Specification
Main Processor	RISC CPU
HDD	80GB, 120/160GB(optional)

Front Panel & RCU

Item	Specification
Keys	CH-/+, VOL-/+, MENU, OK, STANDBY
4-digit 7-segment LEDs	Service number or Time display
LEDs	TV/SAT, REMOTE, STANDBY
RCU	46 Keys

Conditional Access Interface

Item	Specification
PCMCIA	2 slots
	DVB Common Interface Standard

SPECIFICATIONS

A/V & Data In/Out

Item	Specification
TV-SCART	Video CVBS/S-VIDEO/RGB output
	Audio L/R output
VCR-SCART	Video CVBS output, Audio L/R output
	Video CVBS/S-VIDEO/RGB input bypass
	Audio L/R input bypass
S-VIDEO	Video S-VIDEO output
RCA A/V	Video CVBS output
	Audio L/R output
S/PDIF	Digital audio or Dolby AC-3 bitstream output
RS-232C	9 pin D-sub type
	Transfer rate 115.2Kbps
USB	USB2.0 Device

RF-Modulator

Item	Specification
RF-Connector	75Ω, IEC 169-2, Female/Male
Output Channel	CH21 ~ 69(PAL) / CH14 ~ 83(NTSC)
TV standard	PAL G/I/K, NTSC M selectable by Menu

Power Supply

Item	Specification
Input Voltage	90 ~ 250VAC, 50/60Hz
Type	SMPS
Power Consumption	Running: Max. 25W, Standby: 14W
Protection	Separate internal fuse. The input shall be lightning protection

Physical Specification

Item	Specification
Size(W x H x D)	340 x 60 x 265 mm
Weight(Net)	4.2Kg

* **Specifications and functions may be changed for improvement without notice in advance.**

“Manufactured by Topfield Co., Ltd.

FREEVIEW and the FREEVIEW logo are
Trade marks of DTV Service Ltd and are
Used under licence.
Freeview Logo©DTV Services Ltd 2002.

The Channel logos are trade marks and
copyright of their respective owners.”

For Customer Service :
Tel : 01795 429666
E-mail : info@turbosat.com

www.i-topfield.com 110T-F7115-201-0
rev.2.35